# NOTE XIV.

## ON THE SPECIES OF THE PHALANGER-GENUS PSEUDOCHIRUS.

BY

**Dr. F. A. JENTINK.**

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*Pseudochirus* is a well-defined genus of Phalangers, which, up to this time, embraced three species: *cookii*, *bernsteinii* and *albertisii*.

*Pseudochirus viverrinus* Ogilby (1837), from Van Diemen's Land, is regarded as specifically distinct from *Ps. cookii* Desmarest (1817), from the Australian Continent. They are also separated by Gould (Mammals of Australia, 1863), who stated that the island examples are of a larger size and always dressed in a softer and longer fur and who said, that for the present he regarded them as distinct. Gould remarked an analogical phenomenon in *Trichosurus lemurinus* or *vulpinus* from the Australian Continent and *Trichosurus fuliginosus* from Van Diemen's Land. He says „the skins of the Island and Continental Animals are both made into sleeping rugs, but the former are esteemed so much more highly, that a rug formed of them is considered worth three times the price of one of the latter." A conscientious comparison of the skulls however shows that there is no trace of difference between these parts of the continental and of the island forms, neither in form of skull nor in dentition. In my opinion such facts are proofs to illustrate the great variation of a certain species within certain limits; these variations depend upon external causes, as there are: locality, climate, food a. s. o. The study of such influencing circumstances learns us the laws of nature.

In the above quoted work Gould adds a new species, *Pseudochirus lanuginosus*, from het Upper Hunter, Dartbook District. He says: „while in the country I had no difficulty in distinguishing them (viz: *cookii* and *lanuginosus*), and never had a doubt of their being distinct; but what was plain to me in Australia, I am unable to render so clear to the Mammalogists of Europe," and further on „I may remark that there is a greater difference between the *P. lanuginosus* and *cookii*, than there is between *P. cookii* and *fuliginosus*" (this must be a mistake; one should read *viverrinus*, as *fuliginosus* belongs to quite another genus). My opinion is that we have here to do with another mere variation in color, and consequently that *Ps. lanuginosus* is synonymous with *Ps. cookii.*

The large and broad ears and the slender tail, which is constantly white at the apex, distinguish *Pseudochirus cookii* at first sight from the other species of the genus. The skull in its principal parts agrees with the skull of *Ps. albertisii*, but the muzzle is broader, the nasalia are more elongated, the upper incisors are smaller and the lower incisors are otherwise shaped than in that species and agree more with the same parts in *Ps. bernsteinii.*

*Pseudochirus bernsteinii* Schlegel (1866) from Salawatti, has been collected by d'Albertis in New Guinea (1872). Compared with *Ps. albertisii* it is of a smaller size, the fur is shorter and less woolly and a dark brown line ornates the middle of the head and a ditto patch the base of the ears; the peculiar shape of the skull and the weakness of the dentition (see Schlegel, Nederlandsch Tijdschrift voor de Dierkunde. III, p. 358) distinguish this species from the other *Pseudochirus*-species.

*Pseudochirus albertisii* Peters (1874) from the Arfak-mountains, New Guinea, is stouter in all proportions than the foregoing species, the ears are shorter and more hairy, the fur is longer and more woolly and a broad dark line runs along the spine of the back (there is no trace of a line

on the head as one should think in looking at the figure published in Ann. Mus. Civ. Gen. 1881, plate XI). The upper incisors are very stout, the lower ones have a remarkable form (see l. c. fig 2, plate VIII), distinct from the other species. It must be remarked that the figures, l. c. fig. 2, plate VIII and fig. 2, plate IX, have been drawn after a skull with incomplete nasalia. Generally the teeth are more crowded together than in any other *Pseudochirus*-species, and form here an uninterrupted series (for this characteristic and for the form of the teeth, see l. c. fig. 2, plate IX).

To these three very good species I have to add a fourth, which is as well characterised as they are. I propose to call it *Pseudochirus schlegelii* in remembrance of our regretted late Director. This pretty species externally agrees exactly with *Ps. bernsteinii* in all its proportions, and is of the same size. There are only a few differences in color, viz: the head is darker colored and there is no dark stripe on the head; moreover at the base of the ears a light patch is followed by a darker one. Of more significance however are the differences in form of the skull and dentition. The form of the skull calls to mind that part in *Ps. cookii* and *albertisii*; the palate ends close to the last molar and not at some distance behind it as is the case in *Ps. bernsteinii*, moreover all the teeth are stouter (as in *cookii* and *albertisii*) and not so weak as in *bernsteinii*. The length of the upper molar series (with the exception however of the first premolar, which is placed at a certain distance from the other molars in *Ps. bernsteinii*, whereas it is crowded together with the other molars in *Ps. schlegelii*), in the skull of the type-specimen of *Ps. bernsteinii* measures 10 m.m., in the lower jaw the molar series measures 10 m.m., whereas the same parts in a skull of *Ps. schlegelii* of the same size measure respectively 13 and 13 m.m.

The type-specimen, an adult male, has been collected in New Guinea, Arfak Mountains.